

 <p>Financial Assistance Award</p> <p>DENALI COMMISSION 510 L Street, Suite 410 Anchorage, Alaska 99501 (907) 271-1414 (phone) (907) 271-1415 (fax) www.denali.gov</p>		Award Number	01507-04																																																																													
		Award Title	Mertarvik Energy Planning and Design																																																																													
		Performance Period	October 15, 2016 through December 31, 2019																																																																													
Authority 112 Stat 1854	CFDA Number 90.100	<u>Recipient Organization & Address</u> Alaska Energy Authority (Inc) 813 W Northern Lights Blvd Alaska Energy Authority Phone: 907-771-3000 Recipient DUNS # 054072608 TIN # 926001185																																																																														
Denali Commission Finance Officer Certification																																																																																
<u>Cost Share Distribution Table</u> <table border="1" style="width: 100%; border-collapse: collapse; text-align: right;"> <thead> <tr> <th rowspan="2">Accounting Code</th> <th colspan="2">New Funding</th> <th colspan="2">Prior Period Funding</th> <th rowspan="2">Total</th> </tr> <tr> <th>Denali Commission</th> <th>Other Contributors</th> <th>Denali Commission</th> <th>Other Contributors</th> </tr> </thead> <tbody> <tr> <td>95670000</td> <td>(\$803,555.00)</td> <td></td> <td>\$1,700,145.00</td> <td></td> <td>\$896,590.00</td> </tr> <tr> <td></td> <td>\$0.00</td> <td></td> <td>\$0.00</td> <td></td> <td>\$0.00</td> </tr> <tr> <td></td> <td>\$0.00</td> <td></td> <td>\$0.00</td> <td></td> <td>\$0.00</td> </tr> <tr> <td></td> <td>\$0.00</td> <td></td> <td>\$0.00</td> <td></td> <td>\$0.00</td> </tr> <tr> <td></td> <td>\$0.00</td> <td></td> <td>\$0.00</td> <td></td> <td>\$0.00</td> </tr> <tr> <td>State of Alaska</td> <td></td> <td>(\$108,533.00)</td> <td></td> <td>\$181,143.00</td> <td>\$72,610.00</td> </tr> <tr> <td></td> <td></td> <td>\$0.00</td> <td></td> <td>\$0.00</td> <td>\$0.00</td> </tr> <tr> <td></td> <td></td> <td>\$0.00</td> <td></td> <td>\$0.00</td> <td>\$0.00</td> </tr> <tr> <td></td> <td></td> <td>\$0.00</td> <td></td> <td>\$0.00</td> <td>\$0.00</td> </tr> <tr> <td></td> <td></td> <td>\$0.00</td> <td></td> <td>\$0.00</td> <td>\$0.00</td> </tr> <tr> <td>Total</td> <td>(\$803,555.00)</td> <td>(\$108,533.00)</td> <td>\$1,700,145.00</td> <td>\$181,143.00</td> <td>\$969,200.00</td> </tr> </tbody> </table>					Accounting Code	New Funding		Prior Period Funding		Total	Denali Commission	Other Contributors	Denali Commission	Other Contributors	95670000	(\$803,555.00)		\$1,700,145.00		\$896,590.00		\$0.00		\$0.00		\$0.00		\$0.00		\$0.00		\$0.00		\$0.00		\$0.00		\$0.00		\$0.00		\$0.00		\$0.00	State of Alaska		(\$108,533.00)		\$181,143.00	\$72,610.00			\$0.00		\$0.00	\$0.00			\$0.00		\$0.00	\$0.00			\$0.00		\$0.00	\$0.00			\$0.00		\$0.00	\$0.00	Total	(\$803,555.00)	(\$108,533.00)	\$1,700,145.00	\$181,143.00	\$969,200.00
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Signature of Authorized Official - Denali Commission Electronically Signed		Typed Name and Title Mr. Jay Farmwald Director of Programs		Date 02/19/2019																																																																												

AWARD ATTACHMENTS

Alaska Energy Authority (Inc)

01507-04

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1. Terms and Conditions
 2. Attachment A-1

Financial Assistance Award 1507
Between the Denali Commission and Alaska Energy Authority (AEA)
For Mertarvik Energy Systems Development
Amendment 4
24 January 2019

All changes to the award conditions are noted below.

1. Scope:

- Delete the construction of the Phase I power facility.
- Add AEA commissioning of power module in Anchorage, during construction by others.

2. Budget:

- Decrease Denali Commission funding from \$1,700,145 to \$896,590
- Decrease State of Alaska construction phase contribution from \$181,143 to \$12,610
- Add State of Alaska contribution of \$60,000 for the planning and design phase

3. Performance Period:

- Change completion date to 31 December, 2019, to accommodate commissioning activities and award closeout. Other milestone dates remain unchanged.

More detailed information related to the scope of work, budget, deliverables, methodology, and schedule are included in Attachment A-1 dated 24 January 2019.

There are no other changes to the existing Financial Assistance Award.

***Financial Assistance Award 1507
Between the Denali Commission and Alaska Energy Authority (AEA)
For Mertarvik Energy Systems Development
Amendment 4 – Attachment A-1
24 January 2019***

Scope of Work

Construction of the Phase I Modular Power Facility: Amendment No. 3 to this award included scope items for the construction of Mertarvik Phase I power systems. This amendment removes that scope of work. Subsequent to Amendment 3, a term contract for Mertarvik construction has been let and awarded by ANTHC. The intent of this term contract is to facilitate efficient Mertarvik development by consolidating prime contracting responsibility under a single entity and avoid having multiple contractors simultaneously mobilized to a small site competing for limited resources. In support of the “master builder” concept, construction of the power systems will now be accomplished using the term contract vehicle.

Power Plant Start-up and Commissioning: Newtok Village Council (NVC) has requested that AEA continue to provide operation and maintenance support to the Ungusraq Power Company after the Mertarvik power plant has been placed into operation. It is anticipated that this support will include remote monitoring and technical consultations. In order to facilitate this post construction role, it is desirable to have AEA personnel involved during the commissioning and start-up of the facilities. AEA activities will include inspections during manufacturing, factory start-up and functional testing, onsite installation and start-up observations, network integration of remote monitoring systems, and reporting. The work shall be performed in accordance with AEA standard field inspection, testing, and commissioning checklists for power generation facilities.

Deliverables

- In-factory and onsite inspection services for power generation facility
- Network integration of remote monitoring systems
- Inspection, functional testing, and start-up reports

Budget and Funding Summary

This amendment decreases State of Alaska and Denali Commission funding for the project by \$972,088 with \$803,555 of the total from the Commission and \$168,533 from SOA. All of the Commission and SOA funding removed via this amendment will be used to construct the new power plant in Mertarvik via alternate award mechanisms.

In addition to the construction budget reductions noted above, AEA made a \$60,000 contribution for design costs in excess of original estimates. Design costs exceeded estimates due to facility site changes driven by new geotechnical information; and due to changes in available funding. For example, a plan to design and construct a small temporary power module was abandoned once full funding for a permanent power generation facility was secured.

The total budget for Award 1507 after this amendment is \$969,200.

The commissioning component of this award is considered to be a construction activity. Therefore, in accordance with Commission policies it requires a 20% match of \$12,610. The match requirement is satisfied within this award via a \$12,610 contribution from the State of Alaska.

Additional budget detail is provided in the summary table on page 3 of this attachment.

Delivery Method

AEA will provide inspection, network integration, and reporting services using its own personnel. AEA will coordinate its activities with NVC's Relocation Program Manager at ANTHC, who is managing the power systems construction solicitation.

Schedule

Milestone delivery dates for power systems commissioning are as follows:

In-factory start-up and functional testing	31 March 2019
Onsite construction observations/start-up	31 August 2019
Communications/networking systems operational	30 September 2019
Award Close-out	31 December 2019

BUDGET SUMMARY					
Line	Item/Activity	Delivery Method	Budget	Basis / Notes	
1	Planning and Design				
2	Project Management	AEA	\$76,190	Updated actual costs provided by AEA 8-Jan-2019	
3	Energy Master Plan	HDL Contract	\$103,504		
4	Permanent Bulk Fuel Farm Design	HDL Contract	\$324,928	Updated actual costs provided by AEA dated 8-Jan-2019	
5	Permanent Power Plant Design	HDL Contract	\$380,080		
6	Temporary Power Module Design	HDL Contract	\$0		
7		Subtotal	\$884,702		
8	Construction				
9	Power Plant Module Assembly	Contractor	\$0		
10	Power Systems Field Installation	Contractor	\$0	Scope removed	
11	Construction Contingency	Contractor	\$0		
12	Construction Administration	HDL Contract	\$0		
13	Power Module Inspection & Commissioning	AEA	\$60,000	Estimate by AEA dated 08 August 2018	
14	Project Management	AEA	\$3,048	4 hours/month 6 months @\$127/hour	
15		Subtotal	\$63,048		
16	Indirect Costs				
17	10% Indirect Cost ¹	AEA	\$21,424	Applied to lines 2, 13, 14 and the first \$25,000 of lines 3, 4 and 5+6 (see note 2)	
18	Grand Total		\$969,174		
19	Total Project Budget (Rounded)		\$969,200		

FUNDING SUMMARY					
Line	Reference	Denali Commission	State of Alaska	Total	Notes
			Construction ³	Other ⁴	
20	Original FAA Award	379,430			\$379,430
21	Amendment Number 1	320,570			\$320,570
22	Amendment Number 2	129,000			\$129,000
23	Amendment Number 3	871,145	181,143		\$1,052,288
24	Amendment Number 4	(803,555)	(168,533)	60,000	(5912,088) Commission and SOA funds to be reallocated for Mertarvik construction via alternate vehicle
25	TOTAL FUNDING TO DATE	\$896,590	\$12,610	\$60,000	\$969,200
26			Total Budget Estimate	\$969,200	
27			FUNDING SHORTFALL	\$0	
MATCH REQUIREMENT					
28	Total Match Requirement		\$12,610		Minimum non-federal match is 20% of the sum of lines 13 and 14
29	Available Match		\$12,610		Amount carried from line 25
30	Match Deficit		\$0		
Notes					
1. The Alaska Energy Authority (AEA) does not have a negotiated indirect cost rate; use the 10% de-minimis rate in 2 CFR 200.414					
2. Three separate Delivery Orders under AEA's IDIQ contract with HDL					
3. State match funds re-appropriated in SFY 2016 (reference SIA 2015 enrolled in Senate Bill 26)					
4. To cover planning and design costs in excess of the original \$810,729 estimate provided by AEA up to and including Amendment 2					
5. Denali Commission funds available for Commissioning = \$50,438, which is 80% of the total budget for Commissioning					